

**A DEVICE AND METHOD FOR PROVIDING SHIELDING IN RADIO
FREQUENCY INTEGRATED CIRCUITS TO REDUCE NOISE COUPLING**

ABSTRACT

[0051] Disclosed is a semiconductor radio frequency (RF) device having a shielding structure for minimizing coupling between RF passive components and conductive routing for active components. In one example, the device includes at least one shielding layer formed between the RF passive components and conductive routing. The shielding layer includes at least one opening. In another example, a second shielding layer may be used. The second shielding layer may also have an opening, and the openings in the first and second shielding layers may be offset from one another. The first and second shielding layers may be connected to each other through a guard ring, and may also be connected to a common voltage potential.